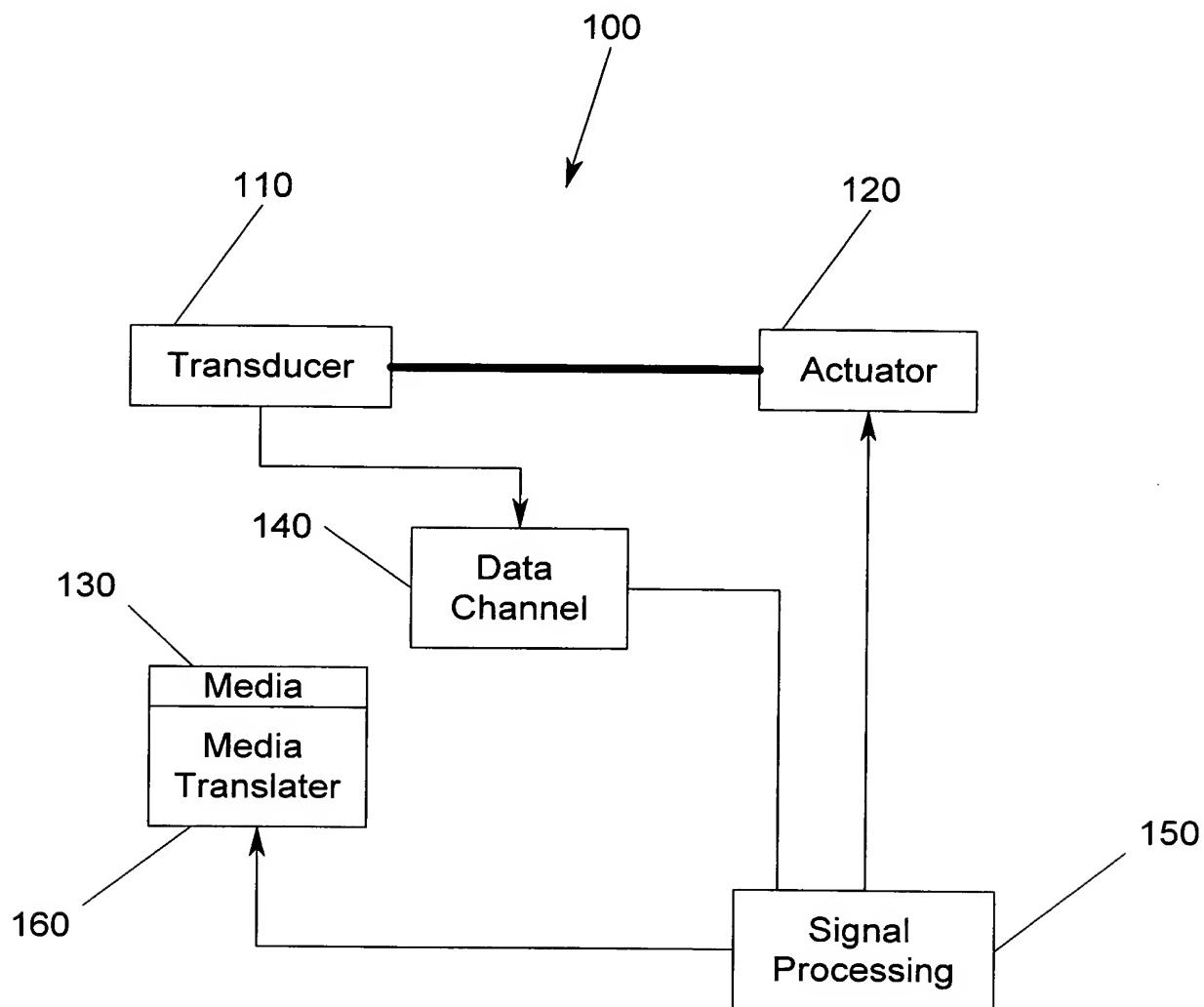


Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 1 of 10



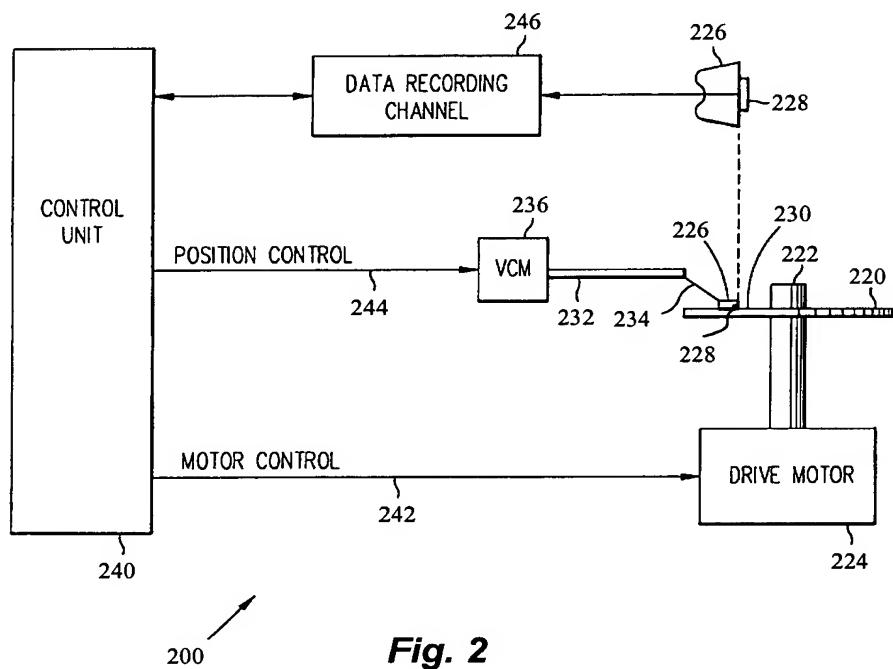
*Fig. 1*

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

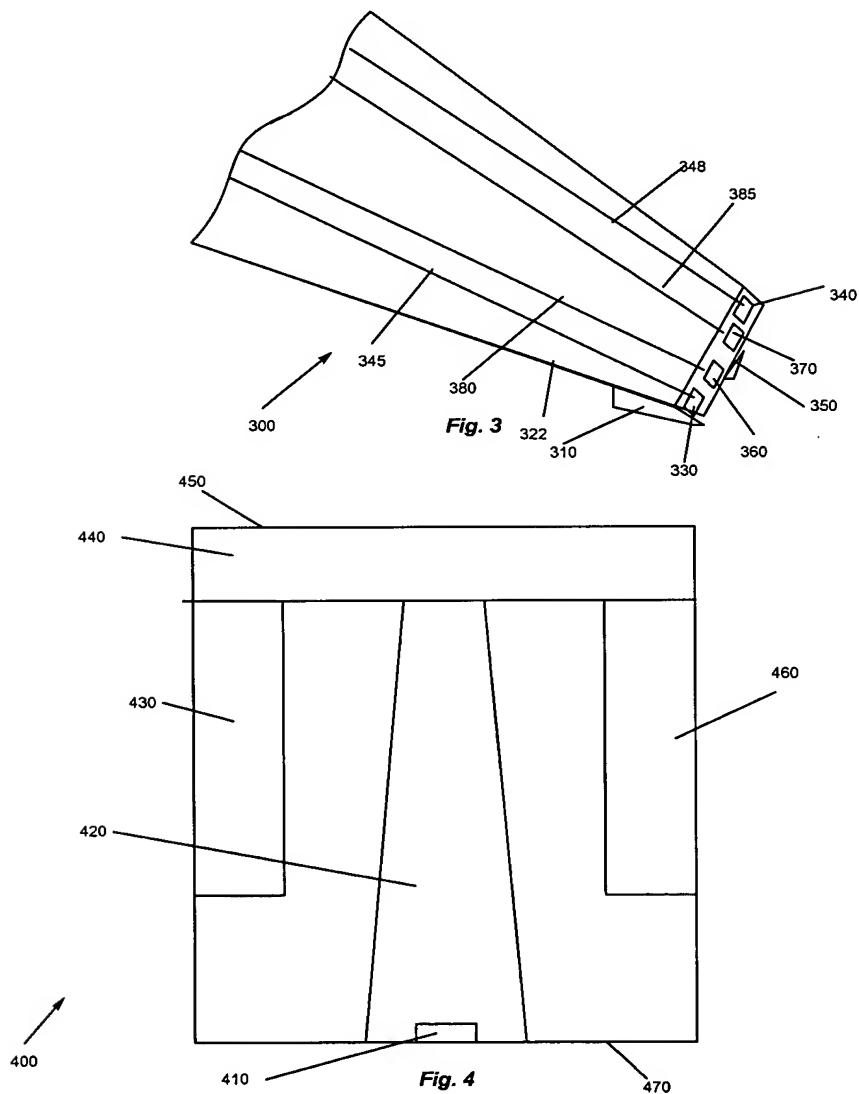
Docket: HSJ920030016US2/HITG.054PA

Sheet 2 of 10



**Fig. 2**

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS  
Applicants: Gill, et al.  
Docket: HSJ920030016US2/HITG.054PA  
Sheet 3 of 10

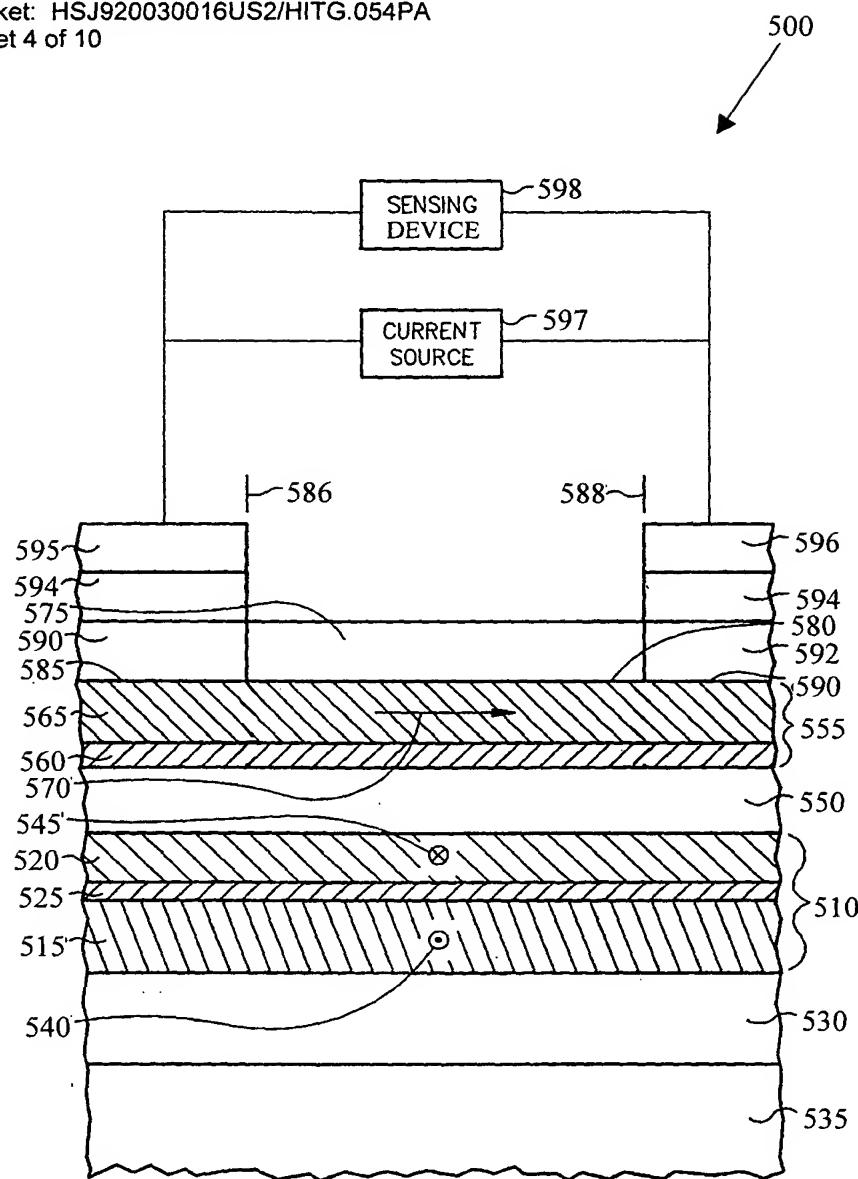


Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 4 of 10



*Fig. 5*

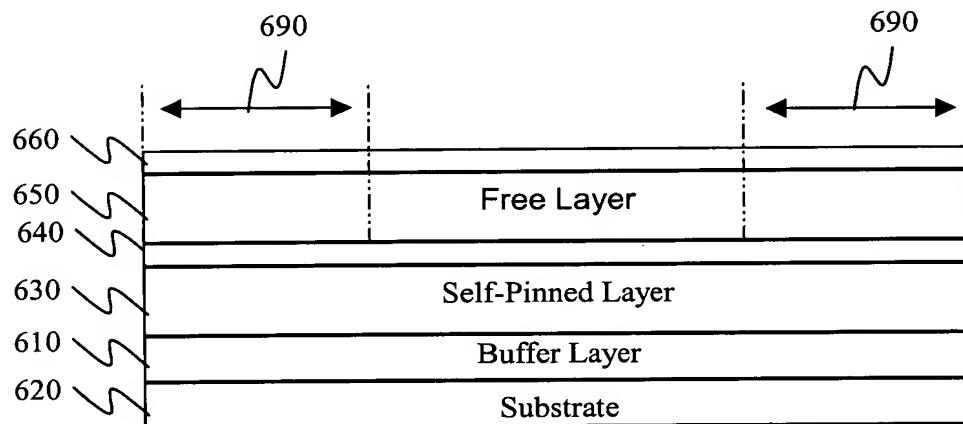
Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

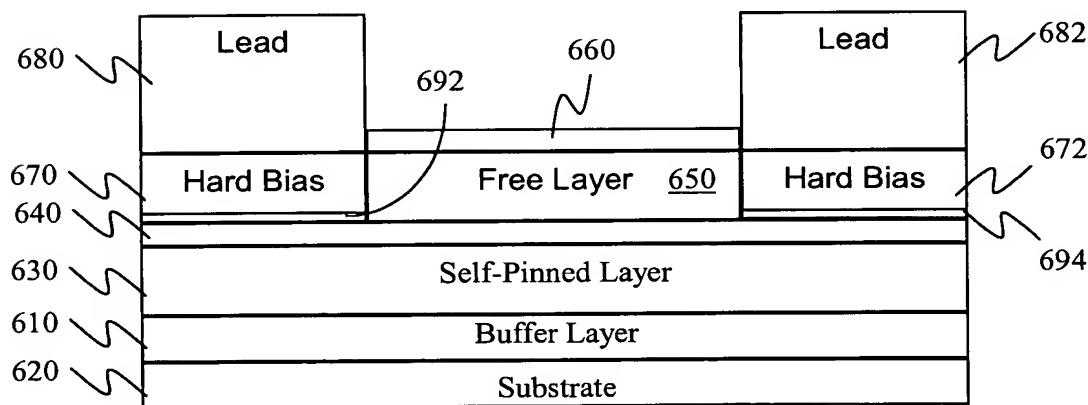
Sheet 5 of 10

600a



**Fig. 6a**

600b



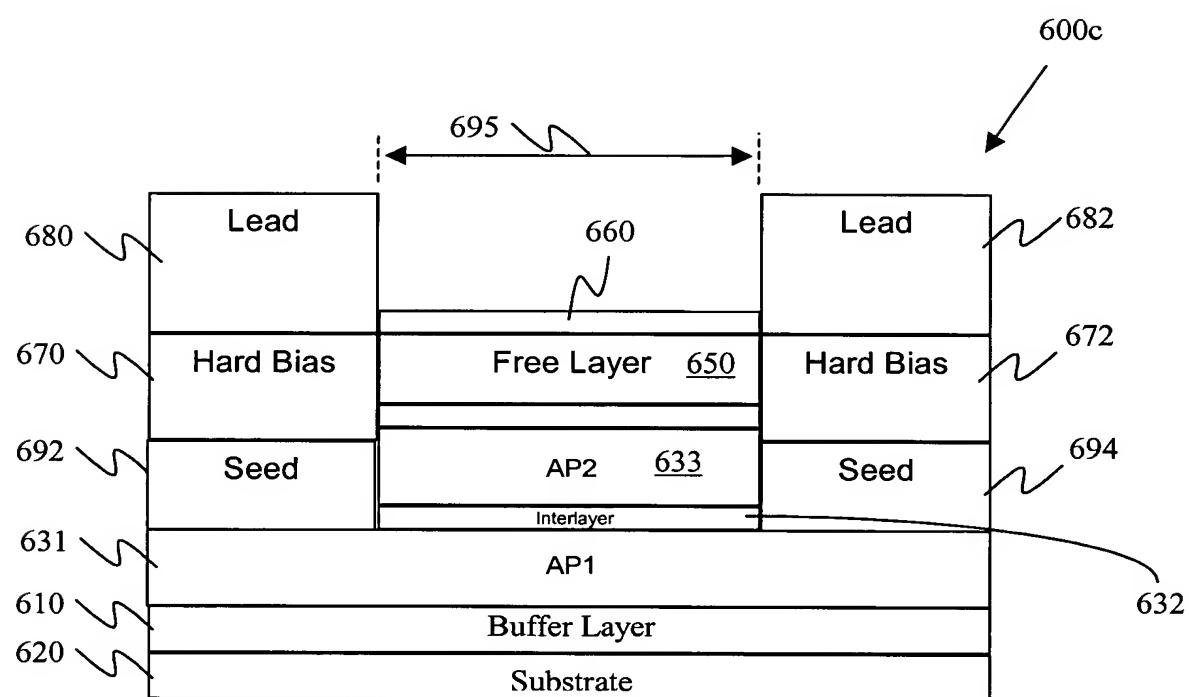
**Fig. 6b**

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 6 of 10



**Fig. 6c**

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 7 of 10

600d  
→

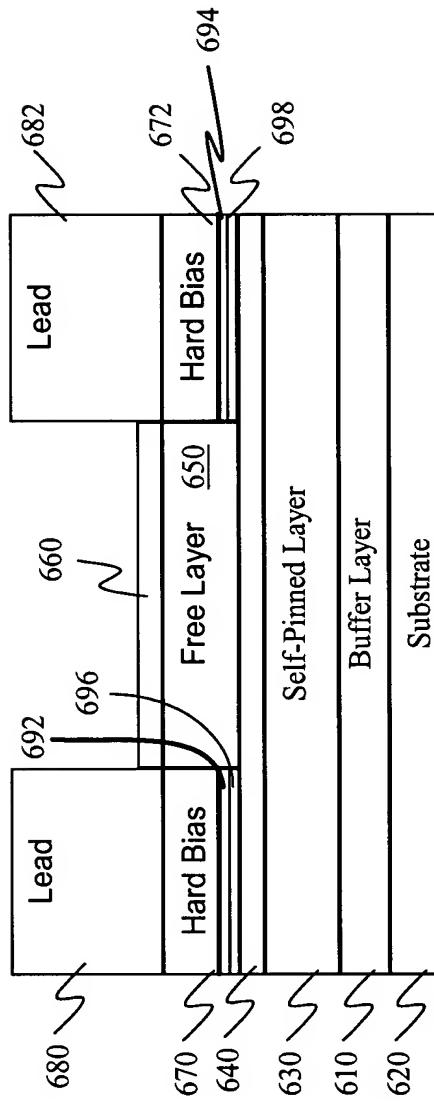


Fig. 6d

**Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS**

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 8 of 10

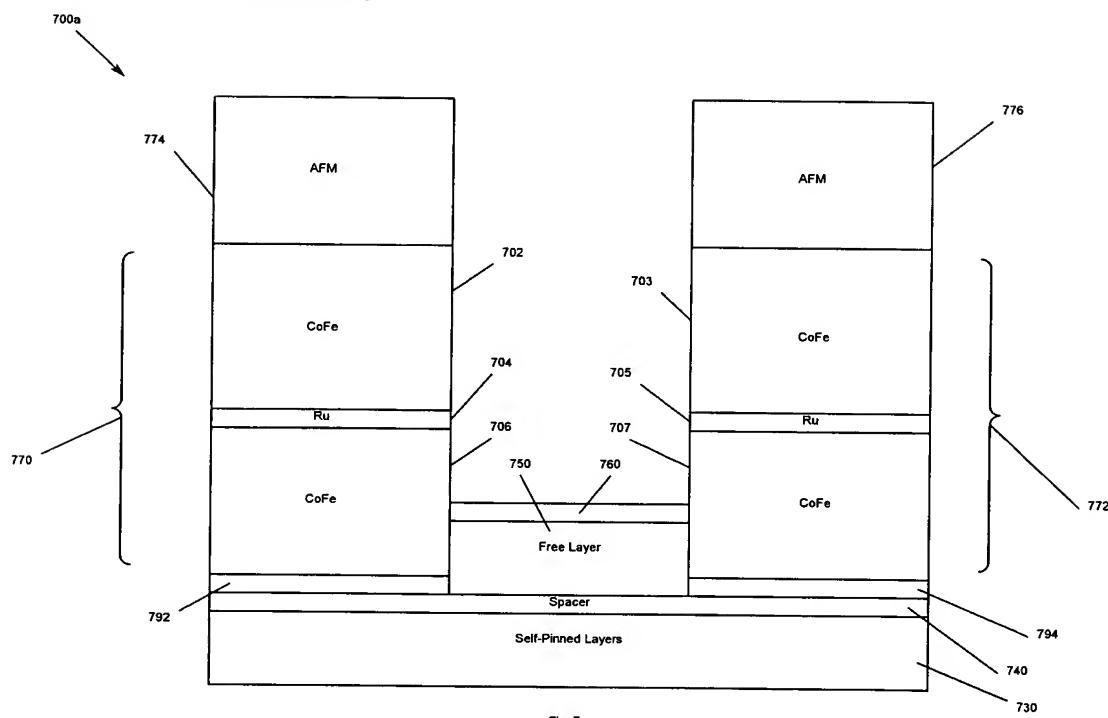


Fig. 7a

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HSJ920030016US2/HITG.054PA

Sheet 9 of 10

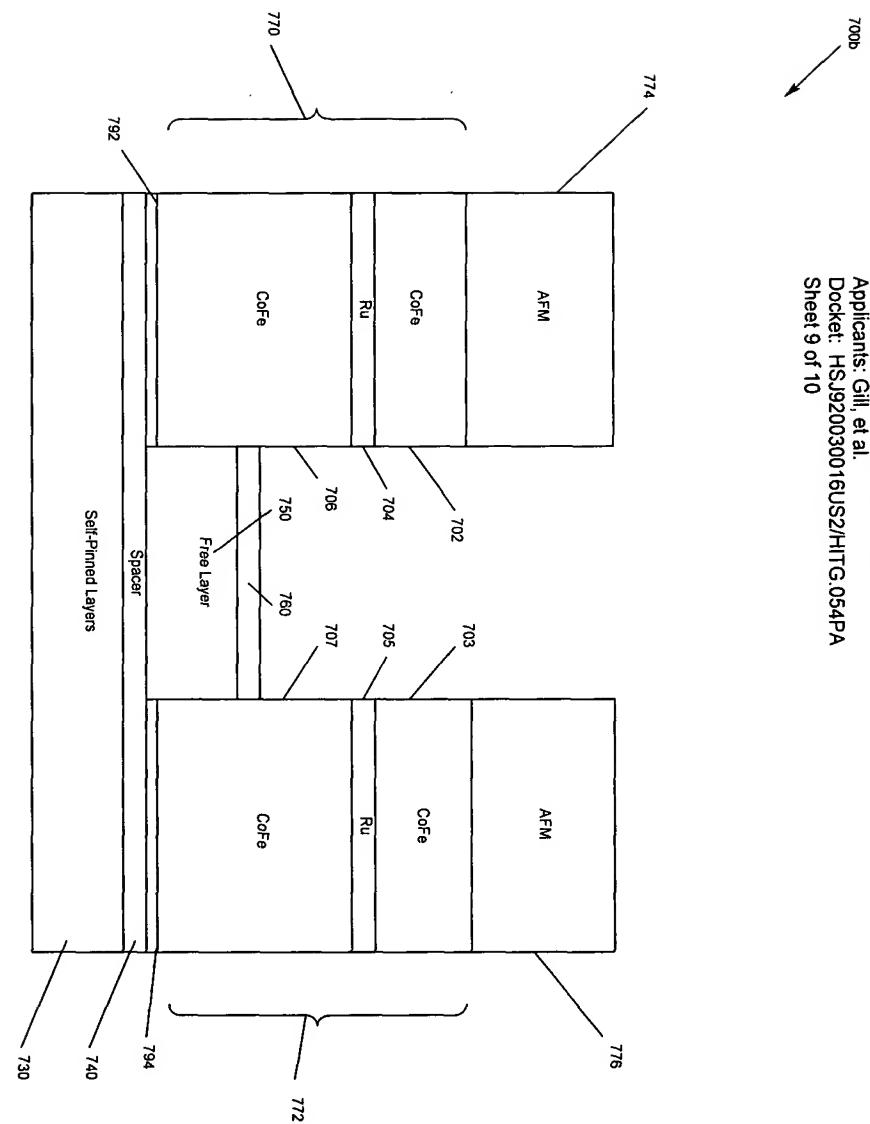


Fig. 7b

Title: METHOD AND APPARATUS FOR ENHANCING  
THERMAL STABILITY, IMPROVING BIASING AND  
REDUCING DAMAGE FROM ELECTROSTATIC DISCHARGE  
IN SELF-PINNED ABUTTED JUNCTION HEADS  
HAVING A FIRST SELF-PINNED LAYER EXTENDING  
UNDER THE HARD BIAS LAYERS

Applicants: Gill, et al.

Docket: HJS920030016US2/HTG.054PA

Sheet 10 of 10

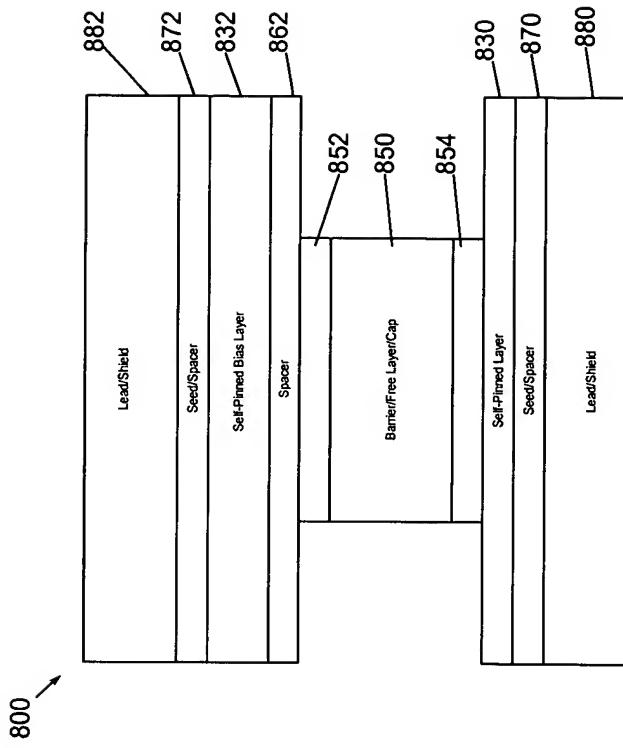


Fig. 8